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Titolo	Computational Red Teaming : Risk Analytics of Big-Data-to-Decisions Intelligent Systems // by Hussein A. Abbass
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ISBN	3-319-08281-7
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (239 p.)
Disciplina	004.5 006.3 620 621.382
Soggetti	Computational intelligence Telecommunication Information retrieval Computer architecture Computational Intelligence Communications Engineering, Networks Data Storage Representation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	The Art of Red Teaming -- Analytics of Risk and Challenge -- Big-Data-to-Decisions Red Teaming Systems -- Case Studies on Computational Red Teaming -- The Way Forward.
Sommario/riassunto	Written to bridge the information needs of management and computational scientists, this book presents the first comprehensive treatment of Computational Red Teaming (CRT). The author describes an analytics environment that blends human reasoning and computational modeling to design risk-aware and evidence-based smart decision making systems. He presents the Shadow CRT Machine, which shadows the operations of an actual system to think with decision makers, challenge threats, and design remedies. This is the first book to generalize red teaming (RT) outside the military and

security domains and it offers coverage of RT principles, practical and ethical guidelines. The author utilizes Gilbert's principles for introducing a science. Simplicity: where the book follows a special style to make it accessible to a wide range of readers. Coherence: where only necessary elements from experimentation, optimization, simulation, data mining, big data, cognitive information processing, and system thinking are blended together systematically to present CRT as the science of Risk Analytics and Challenge Analytics. Utility: where the author draws on a wide range of examples, ranging from job interviews to Cyber operations, before presenting three case studies from air traffic control technologies, human behavior, and complex socio-technical systems involving real-time mining and integration of human brain data in the decision making environment.

- Presents first comprehensive treatment of Computational Red Teaming;
- Provides balanced coverage of the topic from the perspectives of risk thinking and computational modeling;
- Includes thorough coverage of the computational approach to the problem;
- Links risk analytics and challenge analytics with the right set of computational tools to assess risk in complex, "big-data" situations.
